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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/677,060

Applicant(s)

DHARA ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☒ Claim(s) 8, 19, and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 8, 19, and 32 are objected to because of the following informalities:

Claims 8, 19, and 32 state, "packet/circuit switch". They should read, --packet
5 and circuit switch--. It is improper to have "packet/circuit" as it is not clear if this means
"packet or circuit" or "packet and circuit". Therefore it must be clarified in the claim
language.

Appropriate correction is required.

10

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

15

Claims 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject matter which
applicant regards as the invention.

20

In regard to claims 32-34, applicant discloses "a packet [and] circuit switch for
converting data packets to circuit switched traffic." It is unclear how a switch can convert
data from one thing to another as switches only route or direct data to the appropriate
destination(s) and do not manipulate or process the data.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8, 11-19, 23-28, and 35-39 are rejected under 35 U.S.C. 103(a) as
5 being unpatentable over Hamalainen et al. (U.S. Patent 5,802,465) in view of Valentine et al. (U.S. Patent 6,363,253 B1).

Regarding claim 1, Hamalainen discloses "a method of transporting bifurcated voice and signaling data over a network, comprising the steps of:

10 identifying, for each communication link to be established respective signaling data and voice data (figure 2, where it is clear that there is voice or speech data and signaling or control data)..."

However, Hamalainen lacks what Valentine discloses, that is "transmitting said signaling data via a first network and said voice data via a second network, wherein the
15 first network is different from the second network (col. 3, lines 11-17)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the first and second networks with the rest of the method for the purpose of having a dedicated network for setup of calls (Valentine, col. 2, lines 19-26). The motivation being that having a dedicated network for call setup saves resources
20 and doesn't tie up traffic.

In regard to claim 2, Hamalainen and Valentine disclose the method of claim 1. However, Hamalainen lacks what Valentine further discloses, that is "said first network is a wireless network (figure 2, where the first network used for signalling is a wireless network as is clear from the figure)." It would have been obvious to one with ordinary
5 skill in the art at the time of invention to include the wireless network with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 3, Hamalainen and Valentine disclose the method of claim 1. However, Hamalainen lacks what Valentine further discloses, that is "said second
10 network is a data packet network (figure 2, where it is clear the second network (used for voice) is a packet network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the packet network with the method of claim 1 for the same reasons and motivation as in claim 1.

15 In regard to claim 4, Hamalainen and Valentine disclose the method of claim 1. However, Valentine lacks what Hamalainen further discloses, that is "communicating said signaling data to a switch (figure 1B where the signaling data from the mobile stations is communicated to the MSC or Mobile Switching Unit)." It would have been
20 obvious to one with ordinary skill in the art at the time of invention to include the communicating signaling data to a switch with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 5, Hamalainen and Valentine disclose the method of claim 1. However, Valentine lacks what Hamalainen further discloses, that is "communicating said voice data to a switch (figure 1B where the voice data from the mobile stations is communicated to the MSC or Mobile Switching Unit)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the communicating voice data to a switch with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 6, Hamalainen and Valentine disclose the method of claim 3. However, Valentine lacks what Hamalainen further discloses, that is "said voice data is subject to compression processing compatible with a wireless network (col. 6, lines 58-62 where the data compressed is taken to be voice data)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the compression of voice data with the method of claim 3 for the same reasons and motivation as in claim 3.

In regard to claim 7, Hamalainen and Valentine disclose the method of claim 5. However, Valentine lacks what Hamalainen further discloses, that is "said step of communicating is made via a base station system (figure 1B where the data from the mobile stations is communicated via a base station system or the BTS and BSC)." It would have been obvious to one with ordinary skill in the art at the time of invention to

include communicating via base station system with the method of claim 5 for the same reasons and motivation as in claim 5.

In regard to claim 8, Hamalainen and Valentine disclose the method of claim 5.

5 However, Valentine lacks what Hamalainen further discloses, that is "said step of communicating is made via a packet [and] circuit switch (figure 1B where the MSC acts as a packet switch for the wireless system)." It would have been obvious to one with ordinary skill in the art at the time of invention to include communicating via a switch with the method of claim 5 for the same reasons and motivation as in claim 5.

10

Regarding claim 11, Hamalainen disclose "in a communication system for transporting bifurcated voice and signaling traffic over a network, a method comprising the steps of:

15 segregating signaling traffic and related voice traffic including information useful in establishing a communications link for transporting said voice traffic between a calling party and a called party (figure 2, where it is clear that the voice or speech data and signaling or control data are segregated into two channels)..."

20 However, Hamalainen lacks what Valentine discloses, that is "transmitting said voice traffic via said communications link established by a controller, said voice traffic and said signaling traffic being carried via different communication networks (col. 3, lines 11-17)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the different networks with the rest of the method for the purpose of having a dedicated network for setup of calls (Valentine, col. 2, lines 19-26). The motivation being that having a dedicated network for call setup saves resources and
5 doesn't tie up traffic.

In regard to claim 12, Hamalainen and Valentine disclose the method of claim 11. However, Hamalainen lacks what Valentine further discloses, that is "one of said communication networks is a data packet network (figure 2, where it is clear the second
10 network (used for voice) is a packet network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the packet network with the method of claim 11 for the same reasons and motivation as in claim 11.

In regard to claim 13, Hamalainen and Valentine disclose the method of claim 12.
15 However, Hamalainen lacks what Valentine further discloses, that is "said voice traffic is carried by said data packet network (figure 2, where it is clear the second network (used for voice) is a packet network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the voice traffic over the packet network with the method of claim 12 for the same reasons and motivation as in claim 12.

20

In regard to claim 14, Hamalainen and Valentine disclose the method of claim 13. However, Valentine lacks what Hamalainen further discloses, that is "said voice traffic is

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subject to compression processing compatible with a wireless network (col. 6, lines 58-62 where the data compressed is taken to be voice data)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the compression with the method of claim 13 for the same reasons and motivation as in claim 13.

5

Regarding claim 15, Hamalainen and Valentine disclose the method of claim 11. However, Hamalainen lacks what Valentine further discloses, that is "one of said communication networks is a wireless network (figure 2, where the first network used for signalling is a wireless network as is clear from the figure)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the wireless network with the method of claim 11 for the same reasons and motivation as in claim 11.

10

Regarding claim 16, Hamalainen and Valentine disclose the method of claim 15. However, Hamalainen lacks what Valentine further discloses, that is "said signaling traffic is carried by said wireless network (figure 2 where the wireless network carries signaling data to the signaling network as stated in col. 3, lines 11-17)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the signaling data over the wireless network with the method of claim 15 for the same reasons and motivation as in claim 15.

15

20

In regard to claim 17, Hamalainen and Valentine disclose the method of claim 11. However, Valentine lacks what Hamalainen further discloses, that is "said controller is a switch (figure 1B where the controller or BSC clearly routes or switches the calls to the appropriate base stations for further transmission)." It would have been obvious to one
5 with ordinary skill in the art at the time of invention to include the switch controller with the method of claim 11 for the same reasons and motivation as in claim 11.

In regard to claim 18, Hamalainen and Valentine disclose the method of claim 11. However, Valentine lacks what Hamalainen further discloses, that is "said signaling
10 traffic is transmitted to said controller via a base station system (figure 1B where the signaling data from the mobile stations is communicated via a base station system or the BTS and BSC)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the signaling traffic transmitted to a controller via a base station system with the method of claim 11 for the same reasons and motivation as in
15 claim 11.

In regard to claim 19, Hamalainen and Valentine disclose the method of claim 11. However, Valentine lacks what Hamalainen further discloses, that is "said voice traffic is communicated to said controller via a packet [and] circuit switch. (figure 1B where the
20 MSC acts as a packet switch for the wireless system)." It would have been obvious to one with ordinary skill in the art at the time of invention to include communicating via a switch with the method of claim 11 for the same reasons and motivation as in claim 11.

Regarding claim 23, Hamalainen discloses "in a communication system for transporting bifurcated voice and signaling traffic between a calling party and called party, a method comprising the steps of:

- 5 identifying a call request (figure 5, where the channel request step and the response indicates a call request being identified)..."

However, Hamalainen lacks what Valentine discloses, that is establishing a signaling link to a switch via a first transport network (col. 3, lines 11-17); and establishing a voice path to said switch via a second transport network responsive to a
10 determination that said called party answers, said first transport network being different from said second transport network (col. 3, lines 11-17)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the first and second networks with the rest of the method for the purpose of having a dedicated network for setup of calls (Valentine, col. 2, lines 19-26).
15 The motivation being that having a dedicated network for call setup saves resources and doesn't tie up traffic.

In regard to claim 24, Hamalainen and Valentine disclose the method of claim 23. However, Hamalainen lacks what Valentine further discloses, that is "said first network
20 is a wireless network (figure 2, where the first network used for signalling is a wireless network as is clear from the figure)." It would have been obvious to one with ordinary

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skill in the art at the time of invention to include the wireless network with the method of claim 23 for the same reasons and motivation as in claim 23.

In regard to claim 25, Hamalainen and Valentine disclose the method of claim 24.

5 However, Hamalainen lacks what Valentine further discloses, that is "signaling traffic is transmitted over said wireless network (col. 3, lines 11-17)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the signalling traffic over the wireless network with the method of claim 24 for the same reasons and motivation as in claim 24.

10

In regard to claim 26, Hamalainen and Valentine disclose the method of claim 26.

However, Hamalainen lacks what Valentine further discloses, that is "said second network is a data packet network (figure 2, where it is clear the second network (used for voice) is a packet network)." It would have been obvious to one with ordinary skill in
15 the art at the time of invention to include the packet network with the method of claim 26 for the same reasons and motivation as in claim 26.

In regard to claim 27, Hamalainen and Valentine disclose the method of claim 26.

However, Hamalainen lacks what Valentine further discloses, that is "voice traffic is
20 communicated over said data packet network (figure 2, where it is clear the second network (used for voice) is a packet network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the voice traffic over the packet

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network with the method of claim 26 for the same reasons and motivation as in claim 26.

In regard to claim 28, Hamalainen and Valentine disclose the method of claim 27.

5 However, Hamalainen lacks what Valentine further discloses, that is "said voice traffic is subject to compression processing compatible with a wireless network (col. 6, lines 58-62 where the data compressed is taken to be voice data)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the compression with the method of claim 27 for the same reasons and motivation as in claim 27.

10

Regarding claim 35, Hamalainen discloses "...a method comprising:

segregating signaling traffic and related voice traffic including information useful in establishing a communications link for transporting said voice traffic between a calling party and called party (figure 2, where it is clear that the voice or speech data and
15 signaling or control data are segregated into two channels)..."

However, Hamalainen lacks what Valentine discloses, that is "transmitting said voice traffic via said communications link established by a controller, said voice traffic and said signaling traffic being carried via different communication networks (col. 3, lines 11-17)."

20

It would have been obvious to one with ordinary skill in the art at the time of invention to include the first and second networks with the rest of the method for the purpose of having a dedicated network for setup of calls (Valentine, col. 2, lines 19-26).

The motivation being that having a dedicated network for call setup saves resources and doesn't tie up traffic.

However, Hamalainen and Valentine both lack "a computer readable medium storing a software program, that when executed by a computer, causes the computer to perform a method..."

Although Hamalainen and Valentine lack a computer program for executing the method, it would have been obvious to one with ordinary skill in the art at the time of invention to include the computer program for executing the method because a computer program is the only efficient, feasible way of executing the method. The motivation being a fast execution of the method.

In regard to claim 36, Hamalainen and Valentine disclose the method of claim 35. However, Valentine lacks what Hamalainen further discloses, that is "wherein said controller is a switch (figure 1B where the controller or BSC clearly routes or switches the calls to the appropriate base stations for further transmission)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the switch as a controller with the method of claim 35 for the same reasons and motivations as in claim 35.

In regard to claim 37, Hamalainen and Valentine disclose the method of claim 35. However, Valentine lacks what Hamalainen further discloses, that is "signaling traffic is communicated via a wireless network (figure 1B shows the wireless network associated

with the signals of claim 23).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the signalling traffic communicated via a wireless network with the method of claim 35 for the same reasons and motivations as in claim 35.

5

In regard to claim 38, Hamalainen and Valentine disclose the method of claim 35. However, Valentine lacks what Hamalainen further discloses, that is “said voice traffic is communicated via a data packet network (figure 1B where the voice traffic from the mobile stations must carried to and through the TCP/IP network).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the voice traffic communicated via a data packet network with the method of claim 35 for the same reasons and motivations as in claim 35.

In regard to claim 39, Hamalainen and Valentine disclose the method of claim 38. However, Valentine lacks what Hamalainen further discloses, that is “wherein said voice traffic is subject to compression processing compatible with a wireless network (col. 6, lines 58-62 where the data compressed is taken to be voice data).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the compression with the method of claim 38 for the same reasons and motivations as in claim 38.

Claims 9, 10, 20, 21, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen and Valentine as applied to claims 1, 11, and 23 above, and further in view of Kung et al. (U.S. Patent 6,252,952 B1).

5 Regarding claims 9, 20, and 30, Hamalainen and Valentine disclose the methods of claims 1, 11, and 23. However, Hamalainen and Valentine lack what Kung discloses, that is "...a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions (figure 4, element 300 shows a functional equivalent unit of applicant's 106 or 160; figure 3 shows the detailed version of element 300 where
10 element 345 is the functional equivalent of the CT and element 302 is functionally equivalent to the MTA as it sends and receives the voice data from the network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the integrated MTA and CT portions with the method of claims 1, 11, and 23 for the purpose of allowing connectivity to various networks (Kung, col. 6, lines 19-25). The
15 motivation being that the more networks a user is connected to the more services the user has access to.

 Regarding claims 10, 21, and 31, Hamalainen and Valentine disclose the methods of claims 1, 11, and 23. However, Hamalainen and Valentine lack what Kung
20 discloses, that is "...a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions (figure 4, element 300 shows a functional equivalent unit of applicant's 106 or 160; figure 3 shows the detailed version of element

300 where element 345 is the functional equivalent of the CT and element 302 is functionally equivalent to the MTA as it sends and receives the voice data from the network)." Although Kung does not show non-integration of MTA and CT portions, it would have been obvious to one with ordinary skill in the art at the time of invention to have the non-integrated portions because it is a matter of design choice. Choosing to have the portions integrated or non-integrated does not effect the overall function of the device and both choices result in the same function. It would have also been obvious to one with ordinary skill in the art at the time of invention to include the MTA and CT portions with the method of claims 1, 11, and 23 for the purpose of allowing connectivity to various networks (Kung, col. 6, lines 19-25). The motivation being that the more networks a user is connected to the more services the user has access to.

Claims 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen and Valentine as applied to claims 11 and 23 above, and further in view of Jachowski (U.S. Patent 4,726,071).

In regard to claims 22 and 29, Hamalainen and Valentine disclose the methods of claims 11 and 23. However, Hamalainen and Valentine lack what Jachowski discloses, that is "switching the voice traffic to the same communication network as the signaling traffic when loss of local power is detected (col. 1, lines 57-61 where the signaling channel becoming "inoperative" (which also indicates the signalling network is inoperative) is taken to be loss of local power; it is noted that although Jachowski

discloses the signaling channel losing power and reassigning it to a voice channel, the underlying principal is the same as a voice channel losing power and assigning it to a signaling channel, i.e. if a channel loses power then it is reassigned to another channel, it is a matter of design choice how the channels are assigned in the event of power loss)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the reassigning of channels with the methods of claims 11 and 23 for the purpose of allowing voice communications to continue in the event of a power loss. The motivation being continuous communication.

Response to Arguments

The objections to claims 25, 27, 28, and 29 are withdrawn due to applicant's amendment filed on 11 February 2004.

Applicant's arguments, see Remarks, page 11, Section II, filed 11 February 2004, with respect to the rejection(s) of claim(s) 9, 10, 15, 20, 21, 30, 31, 33, and 34 under 35 U.S.C. 112 second paragraph regarding the antecedent basis of claim 15 and the MTA and CT portions have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a clearer understanding of applicant's invention and newly found prior art.

Applicant's arguments filed 11 February 2004 have been fully considered but they are not persuasive.

Regarding the objections to claims 8, 19, and 32, applicant must change the term "packet/circuit" to "packet and circuit" if this is what is meant. The term "packet/circuit" does not clearly convey the meaning of the term. That is to say, the term could mean "packet or circuit" (as suggested in the previous Office Action) or "packet and circuit" (as suggest by applicant).

Regarding the 35 U.S.C. 112 second paragraph rejection of claim 32, applicant argues that the specification, specifically starting on page 6, line 32 and starting on page 7, line 3, clearly explains the use of a "packet and circuit switch" to format from a packet protocol to a circuit protocol. Examiner respectfully disagrees. Pages 6 and 7 do not state the switch performs these protocol conversions, applicant states that device CPBTG 122 performs the protocol conversions. As can be seen in figure 1, element CPBTG 122 (a gateway as defined on page 4, lines 16-17) is not switch 128. Therefore, it remains unclear what applicant is exactly referring to when applicant claims "a packet [and] circuit switch for converting data packets to circuit switched traffic"? Does applicant mean the switch does the converting or does element CPBTG 122?

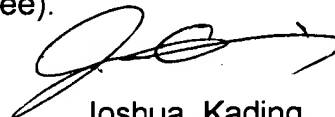
Applicant's arguments with respect to claims 1-8, 11-14, 17-19, 22, 23-29, and 35-39 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for
10 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Joshua Kading
Examiner
Art Unit 2661

April 9, 2004



KENNETH VANDERPUYE
PRIMARY EXAMINER